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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,439	02/19/2004	Andre Georges Cook	DN1999227USAD01	5644

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THE GOODYEAR TIRE & RUBBER COMPANY
INTELLECTUAL PROPERTY DEPARTMENT 823
1144 EAST MARKET STREET
AKRON, OH 44316-0001

EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,439

Applicant(s)

COOK ET AL.

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2-19-04</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Burnham (US 5,792,401).

The applicant by virtue of the Jepson claim form has admitted that it was known to form a hose length by rotating a mandrel, feeding a length of material onto the mandrel as the mandrel rotates to build up the hose length on the mandrel and feeding a length of second material in the form of a reinforcing rod onto the mandrel as the mandrel rotates to form a helical reinforcement on the hose length followed by curing the hose length. The admitted prior art failed to teach that one skilled in the art would have modified a portion of the hose length prior to feeding the reinforcing rod thereon.

Burnham suggested that it was known at the time the invention was made to make a tubular product on a mandrel wherein one applied material upon the mandrel followed by application of helical reinforcement to the mandrel wherein one performed a step of modifying a portion of the tube in length M via application of a curing material for the curable resin (for example) which made up the core tube which was having the reinforcement 63 applied thereto. It should be noted that the curing agent was applied prior to the introduction of the reinforcement onto the tube whereby the tubular structure was hardened so that the reinforcement (in this case a wire) was not embedded within

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the tube but rather remained upon the surface of the same. Additionally, the tube was advanced past the winding device without rotation of the winding device whereby the wire was applied along the axis of the tube generally axially thereon. The reference to Burnham also suggested that such an application (in the axial direction without rotation of the winding device) would have resulted in a reduction in the tension of the wire as it was applied axially of the tube. The reference to Burnham suggested that those skilled in the art would have severed the exposed reinforcing wire after tube formation in order to provide the tube with a tip portion which was unreinforced, see column 12, lines 1-14. The applicant is additionally referred to column 11, lines 40-67 for a description of the application of the reinforcement to the tube wherein one applied the curing material to the curable resin of the tube prior to the application of the reinforcement thereon. It should be noted that the reference to Burnham provided a means for making a tube with reinforced and non-reinforced regions and that such was desirable in the manufacture of a hose length (for a catheter for example). Additionally note that the reference to Burnham suggested that in the finished assembly the reinforcement would not have been present in the tip of the same in order to provide an end portion of the tubing which was unreinforced. In order to provide for the same, one skilled in the art would have understood that the assembly must be severed in the region where no reinforcement was present to provide an unreinforced end portion. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the techniques of Burnham to provide a region of reinforcement which was not integral with the finished assembly and which was easily removed from the tube as it was not

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embedded within the tubular body during manufacture by pretreating the surface of the tube to prevent such embedding when making a hose and/or tubular body where it was desirable to provide a region which was unreinforced in the admitted prior art.

With regard to claim 5, note that the reference to Burnham suggested that those skilled in the art would have modified the tube length by application of a curing agent for the curable material of the tube thereby preventing the embedding of the reinforcement within the tube. Regarding claim 6 note that one skilled in the art would have understood that in order to provide a tip portion which was unreinforced that the assembly was severed at the locations where the reinforcement was removed.

Regarding claim 7, the applicant is advised that there must be relative rotational movement between the wire dispenser and the mandrel in order to angularly apply the same, in the reference to Burnham this was provided by rotation of the reinforcement guide as the mandrel was fed axially past. In the admitted prior art it was provided by rotation of the mandrel and axially passing the wire guide along the axis. When one desired to provide the unreinforced region in Burnham, one simply stopped the rotation of the wire guide wherein the wire was applied along the axis of the mandrel. To provide the wire along the axis of the mandrel in the admitted prior art as the wire guide was moved along the axis, one skilled in the art would have understood that the rotation of the mandrel would have ceased in order to provide longitudinal reinforcement thereon. There is no other means to provide longitudinal reinforcement in the winding system of the admitted prior art which was clearly desirable in accordance with the provision of the non-reinforced regions in Burnham. Regarding claim 8, note that the reference

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suggested that those skilled in the art would have understood that as the wire was applied longitudinally of the tube its tension would have been reduced.

Conclusion


3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wilson (US 4,577,543) taught the feeding of a wire onto a hose wherein the wire was disposed in regions along the axis of the hose (rather than being wound thereon) and in these regions there was a lack of adhesion of the wire with the hose assembly wherein one was able to machine out these portions to provide a hose having reinforced and non-reinforced regions. The reference to U.K. 2009362 suggested a hose with a cuff thereon wherein the cuff was formed via the removal of reinforcement at the end of the hose where the cuff was located. The reference to E.P. 852954 suggested a suitable manner for removal of reinforcement from a tube to make a cuff therein.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
September 3, 2006